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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,833

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Koji Hamano

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7590

01/28/2010

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EXAMINER

DUCHENEAUX, FRANK D

ART UNIT

PAPER NUMBER

1794

MAIL DATE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/564,833	<b>Applicant(s)</b> HAMANO ET AL.	
	<b>Examiner</b> FRANK D. DUCHENEAUX	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-8 is/are pending in the application.
- 4a) Of the above claim(s) 7 and 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 October 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### **Examiner's Note**

The examiner acknowledges the cancellation of claim 4 in the amendments filed 10/5/2009. The examiner notes that the substitute specification, filed 10/5/2009, has been entered.

### ***Response to Amendment***

1. Applicant's arguments, see page 5, filed 10/5/2009, with respect to the objections of the abstract have been fully considered and are persuasive. The objections of the abstract have been withdrawn.
2. Applicant's arguments, see page 5-6, filed 10/5/2009, with respect to the objections of the specification have been fully considered and are persuasive. The objections of the specification have been withdrawn.
3. Applicant's arguments, see page 6, filed 10/5/2009, with respect to the objections of the drawings have been fully considered and are persuasive. The objections of the drawings have been withdrawn.
4. Applicant's arguments, see pages 6-7, filed 10/5/2009, with respect to the rejection of claims 1-5 under 35 U.S.C. 112, 2<sup>nd</sup> paragraph have been fully considered and are persuasive.

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The rejection of claims 1-5 has been withdrawn. The examiner acknowledges his error in rejecting all of claims 1-5 in the previous action as only claims 2 and 4-5 were rejectionable.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. **Claim 2** is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification as originally filed does not provide support for the angle of the current claim measure against an inner side of the molded resin body and as such, the limitation of “toward an inner side of the molded resin body” constitutes new matter.

7. **Claim 5** is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The amended limitations in the current claim encompass a broader scope than that rendered

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specifically in figure 5 of the specification as originally filed and as such, the amended portions of the claim constitutes new matter.

8. **Claim 6** is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification as originally filed does not provide support for a “side portion” of a display screen (see page 5, lines 14-18) and as such, the amended portion of the current claim constitutes new matter.

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. **Claims 1, 3 and 5-6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuhara et al. (US Patent Application Publication 2004/0173940 A1) in view of Kashino (US Patent Application Publication 2003/0183495 A1). The examiner notes that ~940 is a US equivalent of WO 03013823 A1 published 02/13/2003.

**Regarding claim 1 and 5**, Yuhara teaches a double-face in-mold forming method (title), said method directed towards producing a protection panel (article) comprising a transparent resin that becomes united with a first continuous film and a second continuous film to form a molded product (body) (para 0084 and figure 25c, reference number 71) and that said transparent resin molded product has a height that is less than a length (flattened in a thickness direction) as demonstrated in figure 25d. Yuhara continues to teach that upon removal from a mold, the molded product is detached from the first and second continuous films between the exfoliation layer and the UV hard layers (para 0085) thereby leaving attached (coating layer) to both the opposite surfaces (top and bottom surface, figure 25d, reference characters 10 and 17, respectively) of the molded product: an adhesive layer, a printing layer (decorative layer), an anchor layer and said UV hard layer (para 0039 and figures 5a and 5b). The examiner notes that said layers attached to the top and bottom surfaces of said molded product necessarily provides said coating over (covering) the edge part of the upper surface adjacent to a side face (para 0033, lines 6-13 and figures 1a and 1b). Finally, Yuhara teaches a sprue formation portion, a formed portion remaining in the inlet, is cut off (para 0086 and figure 25d, reference character 71a),

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which inherently leaves a side gate mark formed on the side face of the molded product as is well known is the art. With reference to the above passage, especially figures 1a and 1b, the examiner notes that a side gate mark formed on a side face as taught by the reference would not be visible from a top surface of the molded product as seen from any angle from 0 to 180° as would be possible above a planar surface and thus the disclosure of Yuhara would intrinsically provide the angle between the virtual line and the thickness direction as presently claimed. Yuhara fails to teach a decorative layer having an area larger than the coating layer.

However, Kashino teaches a molded resin which is translucent when solidified, fused with a translucent resin film, which comprises a graphic symbol formed thereon (para 0012). Figure 1 and 2 of the reference teach a key top body (12) and a resin film (14) adhered to 12 (on bottom surface) except on the rear surface (12a) (top surface), whereon a graphical (decorative) symbol layer (13) is formed on a rear surface (14a) of 14 and further that that 12 is formed by injection molding a translucent synthetic resin into a form (para 0024). Figure 2 also teaches a decorative layer (19) on 12a, which provides key top (11) with design diversity (para 0032, lines 9-12). Figure 2 further teaches that 14 and 13 form a decorative layer having a larger surface area than 19 (coating layer). The examiner notes that a resin film (14) adhered to 12 except on the rear surface (12a), necessarily provides the resin film on the entirety of the surface (bottom surface) not being surface (12a).

The examiner notes that the Kashino reference was employed to teach a resin body which has a layer on a side and an opposing side and that the layer on a side has a graphical symbol and that

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said layer has a larger surface area than that of a layer on said opposing side. It is noted that, even though Kashino recites the side having the larger surface area is a rear surface in the Kashino invention, the designation of a rear, or bottom, surface and a top surface is only relevant based on a particular reference point. One side having a layer of a surface area different than that of an opposing side would be based on such considerations as aesthetic appeal, design parameters, etc., and that labeling one surface as a top surface and the other as bottom surface would not only be clearly obvious to one of ordinary skill when employing Kashino as a teaching reference in combination with the analogous Yuhara reference to teach one side simply having a larger than an opposing side. In other words, it would be obvious for any one item to have surfaces with differing areas as presently claimed. Finally, Kashino's disclosure of a resin film (14) adhered to 12, **except** on the rear surface (12a), in combination with the analogous Yuhara reference renders obvious a decorative layer formed on an entire bottom surface as presently claimed.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the invention as taught by Yuhara with the layered configuration as taught by Kashino towards an in-mold decorated product with a specific practical and aesthetic appeal as befits its industrial and/or consumer applicability as in the present invention.

**Regarding claim 3**, Figures 1a, 5 and 25d of Yuhara teach a coating layer (1a and 12) formed on the entire surface of the top surface other than where the transparent window (1b) is and that this coated portion is on the edges of the top surface adjacent to the side face where the sprue formation (gate mark) portion was.



**Regarding claim 6**, Yuhara also teaches that said printing layers are printed on some areas of the opposite surface and not printed on other areas of the opposite surfaces forming a transparent window in the areas where the printings are not formed (para 0040 and figures 5a, 5b and 5c) and that areas associated with reference characters 1b and 2b of figures 1a and 1b are a transparent display window (display screen part) (para 0033, lines 712). The examiner notes that as stated in the rejection of claim 1 above, wherein a side gate mark formed on the side face of the molded product, provides a side gate mark at a side portion transparent display window as presently claimed.

12. **Claim 2** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuhara et al. (US Patent Application Publication 2004/0173940 A1) and Kashino (US Patent Application Publication 2003/0183495 A1) in view of Isao (Patent Abstracts of Japan Publication Number 2001-277288) and in further view of Miyajima (US 5824252).

**Regarding claim 2**, Yuhara and Kashino teach the resin molded product as in the rejection of claim 1 above. Yuhara also teaches a protection panel used as a display window for a cellular phone (para 0033, lines 1-4). Figure 2 of Kashino also teaches a gate mark (17) at 0° with surface (12a) of key top body (12) (para 0034). Yuhara and Kashino fail to teach a side gate mark with a thickness of 0.4 mm in the thickness of a molded resin body and an angle made between a cross-section of the side gate mark and the thickness direction of the molded resin body is 0 to 60°.

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However, Isao teaches a thin-walled window covering for a portable telephone by inserting a decorative film having a transparent window part formed in a mold capable of a molding resin molded article having a main body thickness of 0.8-3.0 mm and a pawl part to perform injection molding (abstract). Additionally, Miyajima teaches a method of resin molding and resin molding machine for the same (title and figure 2), said methods employing gates (18) generating a gate mark (18a) formed on the side edges of the cavities (11) (column 6, lines 21-34 and figures 4A, 4B and 5). Miyajima also teaches a depth of the gate connected to the cavity is limited to about 50% of the thickness of the package section (column 10, lines 26-28) and figure 5 of the reference teaches a gate mark (18a) formed by injecting resin into gate (18) has an angle with the thickness direction of greater than  $0^\circ$  and less than  $90^\circ$ , which intrinsically provides said angle in relation to an inner side of the resin body as presently claimed. Miyajima further teaches a wide gate connected to a cavity so that resin melt can be efficiently filled into the cavities in a short time without accelerating the resin, thus preventing voids in the resin so that reliability and quality of molded products can be improved (column 10, lines 17-23). Isao and Miyajima fail to teach a range of a thickness of a gate mark of 0.4 mm.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a resin molded product for use as a display window in a cellular phone as taught by Yuhara and Kashino with a resin body of a thickness as taught by Isao and further to provide a gate for injecting resin into a cavity for molding a molded article, and thus a gate mark, at a specific angle and with a specific width and depth commensurate with the desired thickness

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of the molded article so as to maximize the efficiency of manufacturing said article while maintaining said articles quality as in the present invention.

### ***Response to Arguments***

13. Applicant's arguments, see pages 7-9, filed 10/5/2009 with respect to the rejection of claims 1, 3 and 5-6 over Yuhara et al. in view of Kashino under 35 U.S.C. 103(a) and the rejection of claims 2 and 4 Yuhara et al. in view of Kashino and in further view of Isao and Miyajima under 35 U.S.C. 103(a) have been fully considered but they are not persuasive. The examiner's complete response follows.

Applicants argue that the Yuhara reference does not disclose a decorative layer which has a larger area than a coating layer, said decorative layer formed on an entire bottom surface of a molded resin body as required by claim 1 and that the analogous Kashino reference does not remedy the deficiencies of Yuhara. The applicants' assertion against the Kashino reference is based on the Kashino's disclosure that the resin film (14) and the graphical symbol layer (13) (combined teach the decorative layer as presently claimed) are adhered to a surface of a key top body (12) except the rear surface (12a) and as such, Kashino discloses a resin film and graphical symbol layer that is not formed on the bottom and therefore does not teach a decorative layer formed on an entire bottom surface of a molded resin body.

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The examiner directs the applicants' attention to the rejection of claim 1 of the previous action, which is currently maintained and repeated above. The examiner notes, as is set forth in the examiner's interpretation of the Kashino reference as set forth in the above rejection, that the Kashino reference was employed to teach a resin body which has a layer on a side opposite an opposing side and that the layer on a side has a graphical symbol, or decoration, and that said layer has a larger surface area than that of a layer on said opposing side. The examiner asserts that even though Kashino teaches that the side having the larger surface area is a rear surface, the designation of a rear (or bottom) and top is merely a matter of specific reference point and that having one side having a layer of a surface area different than that of an opposing side would be based on aesthetic appeal, design parameters, etc., and that labeling one as top and the other as bottom would not only be clearly obvious to one of ordinary skill, but irrelevant in regards to employing Kashino as a teaching reference in combination with the analogous Yuhara reference in a manner as previously set forth. Finally, as set forth above Kashino's disclosure of a resin film (14) adhered to 12 **except** on the rear surface (12a) in combination with the analogous Yuhara reference renders obvious a decorative layer formed on an entire bottom surface as presently claimed.

The applicants also argue that decorative layer (19), which is formed on the rear surface (12a) of (12), does not correspond to a decorative layer which has a larger area than the coating layer as required by current claim 1.

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The examiner notes that, as stated above, items (13) and (14) of Kashino are employed to teach said decorative layer having said area as presently claimed.

***Conclusion***

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANK D. DUCHENEAUX whose telephone number is (571)270-7053. The examiner can normally be reached on M-Th, 7:30 A.M. - 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie E. Shosho can be reached on (571)272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/F. D. D./

Examiner, Art Unit 1794

/Callie E. Shosho/

Supervisory Patent Examiner, Art Unit 1794